



INDOT 2000-2025 Long Range Plan Update to the 1995 Multimodal Plan Executive Summary

INDOT 2000-2025 Long Range Plan

The INDOT 2000-2025 Long Range Plan lays out a strategy for the future of the state highway system, which is intended to provide Hoosiers the highest level of **mobility** and **safety** possible, and to meet the needs of **economic development** and **quality of life** into the next quarter century. The Long Range Plan provides an update of the 1995 Statewide Multimodal Transportation Plan entitled *Transportation in Indiana: Multimodal Plan Development for the 1990's and Beyond*. The 1995 multimodal policy plan provides a foundation for developing more detailed plans for specific transportation modes. This highway plan document is intended to extend the planning period for highway improvements from the initial five years of the 1995 Plan to a 25 year planning horizon. This extended planning period provides INDOT and our planning partners, including the state's Metropolitan Planning Organizations and other key transportation stakeholders, a long range vision of how the state jurisdictional highway system will develop in the future.

INDOT intends to revisit the Statewide Multimodal Transportation Plan in the near future to update the linkage between the highway system and the other transportation modes.

Public Input is Vital

INDOT has established a proactive public involvement process in the planning and development of transportation projects. Over the past three years, INDOT has communicated the plan development process to state transportation professionals, local elected officials, and the public at Metropolitan Planning Organization conferences and the Purdue Road School. INDOT also conducted an Indiana Futures Symposium, bringing national transportation experts and community and business leaders together to identify potential improvements to the state's transportation system.

The 2000-2025 Long Range Plan was developed with the full input of our statewide planning partners, including the state's Metropolitan Planning Organizations, the Federal Highway Administration, and INDOT's District Offices.



New System Definition

The 2000-2025 Long Range Transportation Plan created a new and simplified three tier highway hierarchy. Descriptions of these three tiers follow.

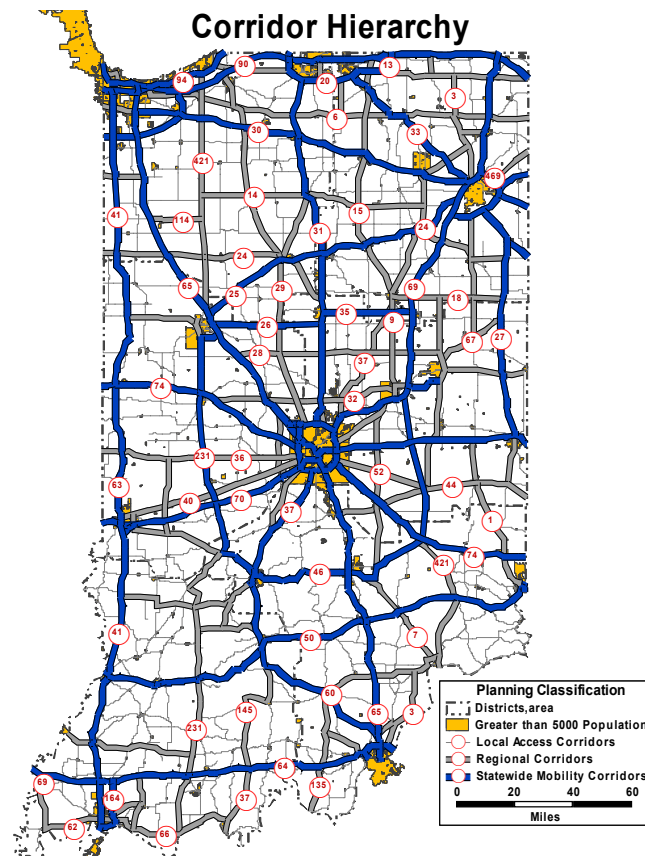
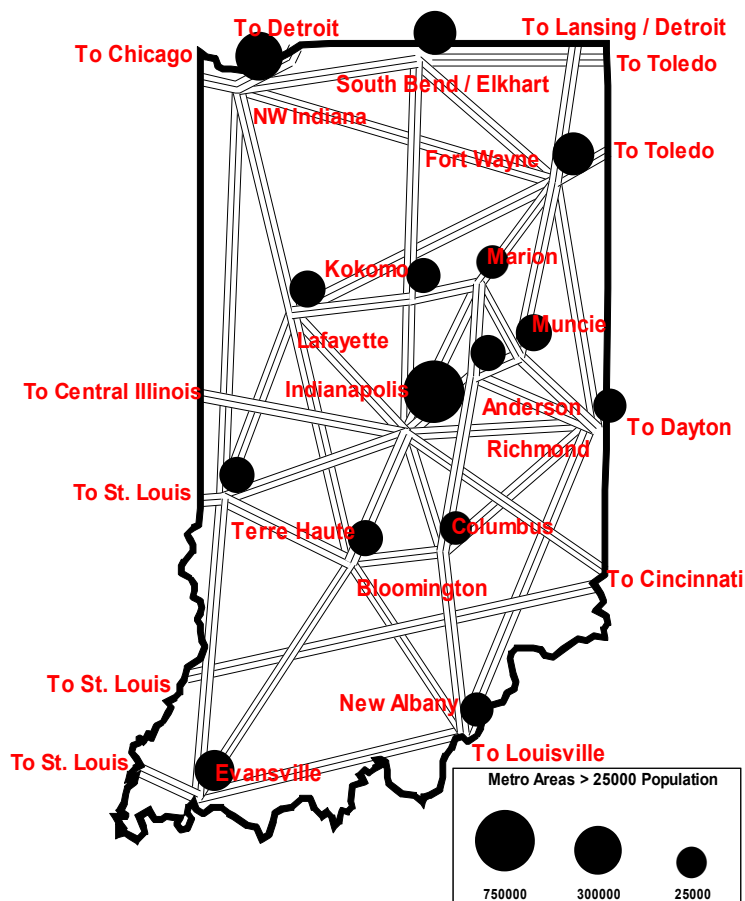
1. Statewide Mobility Corridors

Statewide Mobility Corridors serve as the connection between urban areas of 25,000 persons or greater in Indiana and neighboring states, provide macro-level accessibility to cities and regions around the state, and play a vital role in economic development. These roadways carry long distance trips, heavier commercial vehicle flows and warrant upper level design standards, such as multiple travel lanes, railroad and highway grade separations, and bypasses of congested areas.

Characteristics:

- Upper level design standards
- High speed
- Free flowing traffic conditions
- Serves long distance trips
- Large through traffic volumes
- Heavy commercial vehicle flows
- Carry longer distance commuter traffic
- Generally multi-lane, divided
- Full access control desirable, no less than partial access control
- Railroad and highway grade separations desirable
- Desirable to bypass congested areas

Statewide Mobility Connections between Population Centers



2. Regional Corridors

Regional Corridors serve as a connection to smaller cities and regions, feed traffic to the Statewide Mobility Corridors, and provide for regional accessibility.

Characteristics:

- Mid-level design standards
- High to moderate speed
- Free-flow to the extent practicable in rural areas
- Serve medium distance trips
- Carry medium distance commuter traffic
- Moderate through traffic volumes
- Moderate commercial vehicle flows
- Potential for heavy local traffic volumes
- Typically, at grade intersections with highways and railroads, with consideration for railroad separation
- High-level two-lane or multi-lane
- Partial access control desirable
- Conventionally routed through cities and towns

3) Local Access Corridors

Local Access Corridors serve intra- and inter-county short distance trips, provide access to local residences and businesses, and provide access to rural areas and small towns.

Characteristics:

- Lower-level design standards
- Moderate to low speed
- At-grade intersections with highways and railroads
- Minimal access control
- Short distance trips
- Low through traffic volumes
- Moderate local traffic volumes
- Typically two-lane with multi-lane exceptions
- Frequent interaction with non-motorized vehicles and pedestrians
- Routed through cities and towns

System Performance Results (ratio of actual travel time to ideal travel time)														
	Indianapolis	Evansville	N W Indiana	S. Bend/Elk.	Fort Wayne	Anderson	Muncie	Kokomo	Lafayette	Bloomington	Terre Haute	Columbus	Richmond	Marion
Indianapolis		1.395	1.107	1.321	1.248	1.424	1.466	1.343	1.210	1.354	1.160	1.215	1.147	1.403
Evansville	1.395		1.292	1.406	1.329	1.404	1.413	1.397	1.400	1.532	1.292	1.525	1.459	1.406
N W Indiana	1.107	1.292		1.219	1.331	1.328	1.434	1.463	1.122	1.242	1.284	1.125	1.312	1.503
S. Bend/Elk.	1.321	1.406	1.219		1.535	1.444	1.548	1.354	1.437	1.370	1.458	1.318	1.518	1.488
Fort Wayne	1.248	1.329	1.331	1.535		1.242	1.422	1.391	1.396	1.283	1.293	1.276	1.320	1.342
Anderson	1.424	1.404	1.328	1.444	1.242		1.505	1.866	1.386	1.385	1.262	1.450	1.484	1.422
Muncie	1.466	1.413	1.434	1.548	1.422	1.505		1.590	1.414	1.418	1.284	1.514	1.523	1.733
Kokomo	1.343	1.397	1.463	1.354	1.391	1.866	1.590		1.427	1.421	1.503	1.317	1.571	1.517
Lafayette	1.210	1.400	1.122	1.437	1.396	1.386	1.414	1.427		1.388	1.490	1.215	1.291	1.395
Bloomington	1.354	1.532	1.242	1.370	1.283	1.385	1.418	1.421	1.388		1.466	1.561	1.408	1.367
Terre Haute	1.160	1.292	1.284	1.458	1.293	1.262	1.284	1.503	1.490	1.466		1.440	1.178	1.417
Columbus	1.215	1.525	1.125	1.318	1.276	1.450	1.514	1.317	1.215	1.561	1.440		1.561	1.363
Richmond	1.147	1.459	1.312	1.518	1.320	1.484	1.523	1.571	1.291	1.408	1.178	1.561		1.543
Marion	1.403	1.406	1.503	1.488	1.342	1.422	1.733	1.517	1.395	1.367	1.417	1.363	1.543	
Louisville	1.145	1.235	1.123	1.038	1.240	1.270	1.354	1.188	1.163	1.495	1.488	1.179	1.493	1.306
Chicago	1.169	1.294	1.404	1.410	1.368	1.356	1.429	1.442	1.216	1.278	1.279	1.184	1.337	1.529
Cincinnati	1.184	1.244	1.205	1.459	1.447	1.464	1.474	1.389	1.197	1.357	1.229	1.113	1.497	1.420
City Total	20.291	22.023	20.494	22.323	21.463	22.692	23.521	23.179	21.147	22.325	21.523	21.356	22.642	23.154

Inter-City Connectivity for the Existing Highway System

In order to assess the mobility levels provided by the inter-city connectivity of the current highway system, fourteen Indiana metropolitan areas were evaluated in terms of point to point actual travel time over existing highways compared to the "ideal" travel time (a straight-line connection at legal speed limits) between the same points. The ratio of actual travel time to ideal travel time for these fourteen communities yield results ranging from 1.107 to 1.860. In the table shown above, areas highlighted in gray represent near ideal travel times. Areas not highlighted correspond to average travel times, and areas highlighted in black denote a deficiency in travel time between two cities. The inter-city connectivity performance provides the basis for the development of the multi-tiered corridor concept of the Statewide Mobility Corridor System.

Highway Needs 2000-2025

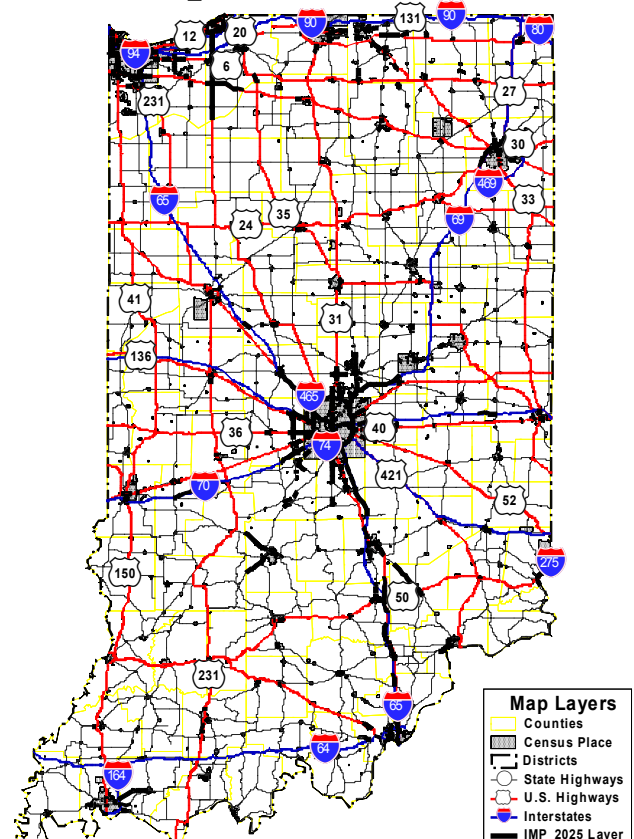
Traffic growth rates from the Indiana Statewide Travel Demand Model are used to identify future year traffic volumes based upon forecasted socio-economic growth. Over the 2000-2025 time period, statewide population is forecasted to increase 17%, statewide employment is forecasted to increase 30%; however, travel demand is estimated to increase much more rapidly at 62%.

The Highway Economic Requirements System for Indiana (HERS_IN) is one of the system planning tools developed for statewide transportation plan development. HERS_IN is a long-range planning tool for the analysis of highway system investments. HERS_IN is developed from the National Highway Economic Requirements System developed by the Federal

Highway Administration (FHWA) for national highway investment analysis.

INDOT has modified the national model for specific application to Indiana's highway system analysis needs in developing HERS_IN. Two alternative levels of highway system investment were evaluated for the year 2000 to 2025. A **full needs** scenario, which allows the selection of any HERS_IN identified highway improvement, is compared to a **no-build** alternative to identify the impacts of future travel growth without any additional highway investment.

HERS_IN NEEDS ANALYSIS 2000-2025

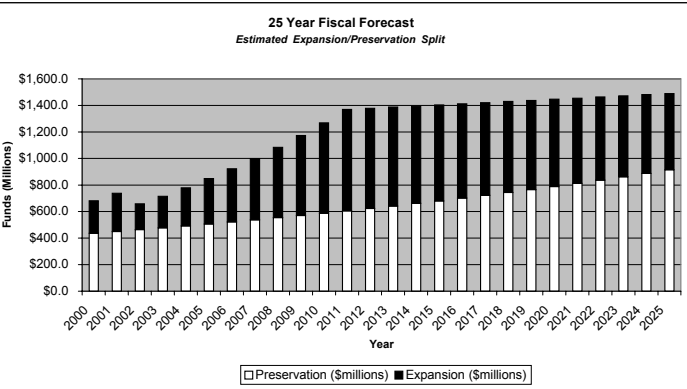


The **full needs** scenario identified 1074 miles of added travel lanes projects. Assuming these improvements were made, the miles of congested highway would decrease from 4% in 2000 to 2% in 2025. Urban Interstate speeds would remain constant from 2000 to 2025. Overall highway system performance would remain stable with a 1% reduction from 53 mph in 2000 to 52 mph in 2025.

The **no-build** scenario resulted in the increase of congestion from 4% of highway mileage in 2000 to 25% in 2025. Urban Interstate system speed would decrease 25% by 2025. Overall system performance as measured by operating speed would decrease 10% from 53 mph in 2000 to 48 mph in 2025.

The Fiscal Forecast

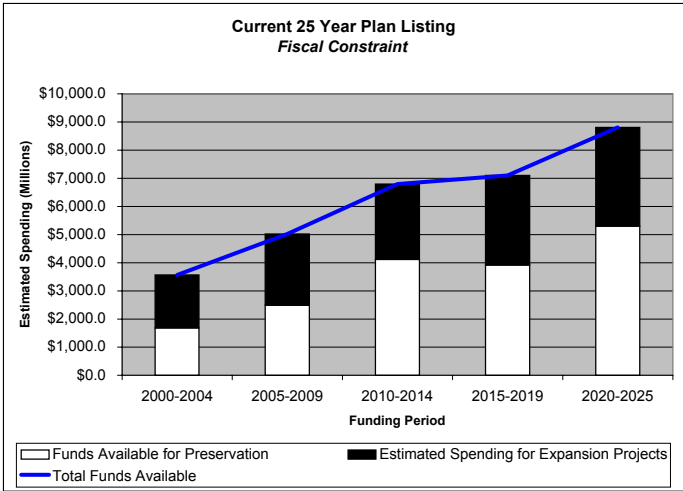
The long-range fiscal forecast has been developed after analyzing various funding scenarios for the department. The budget forecast was developed by the INDOT Division of Policy and Budget in three segments for the 2000 to 2025 forecast period. The first segment is made up of the 2000 to 2001 biennial budget. The second segment is for the 2002 to 2011 medium term and assumes a higher growth rate based upon historical revenue trends. The third segment for 2012 to 2025 assumes a more conservative approach, basing the increase in transportation funding on the forecasted growth of the state's population.



The resulting forecast for the 25 year period, combining these three forecast segments, provide a balanced overall estimate of future revenues.

Long Range Fiscal Forecast			
Initial estimate of Preservation/Expansion Split			
Funding Period	Preservation	Expansion	Total
2000-2004	\$2,319.0	\$1,250.2	\$3,569.2
2005-2009	\$2,688.4	\$2,337.0	\$5,025.4
2010-2014	\$3,116.4	\$3,682.9	\$6,799.3
2015-2019	\$3,612.8	\$3,489.9	\$7,102.7
2020-2025	\$5,102.7	\$3,705.7	\$8,808.4
	\$16,839.3	\$14,465.7	\$31,305.0

Note: All figures are listed in millions of current (2000) dollars



Fiscal Constraints

The previous financial forecasts provided a guideline for the sizing of each of the five individual five year phasing periods. Proposed transportation improvements were shifted from one time period to another to better match forecasted revenues. The chart below identifies the funding by implementation phase for highway capacity expansion projects after the priority highway system preservation needs are funded.

The sizing of the five individual implementation phases is shown below. The financial analysis indicates the overall program 2000 to 2025 plus the five funding implementation periods meet the planning objective of fiscal constraint.

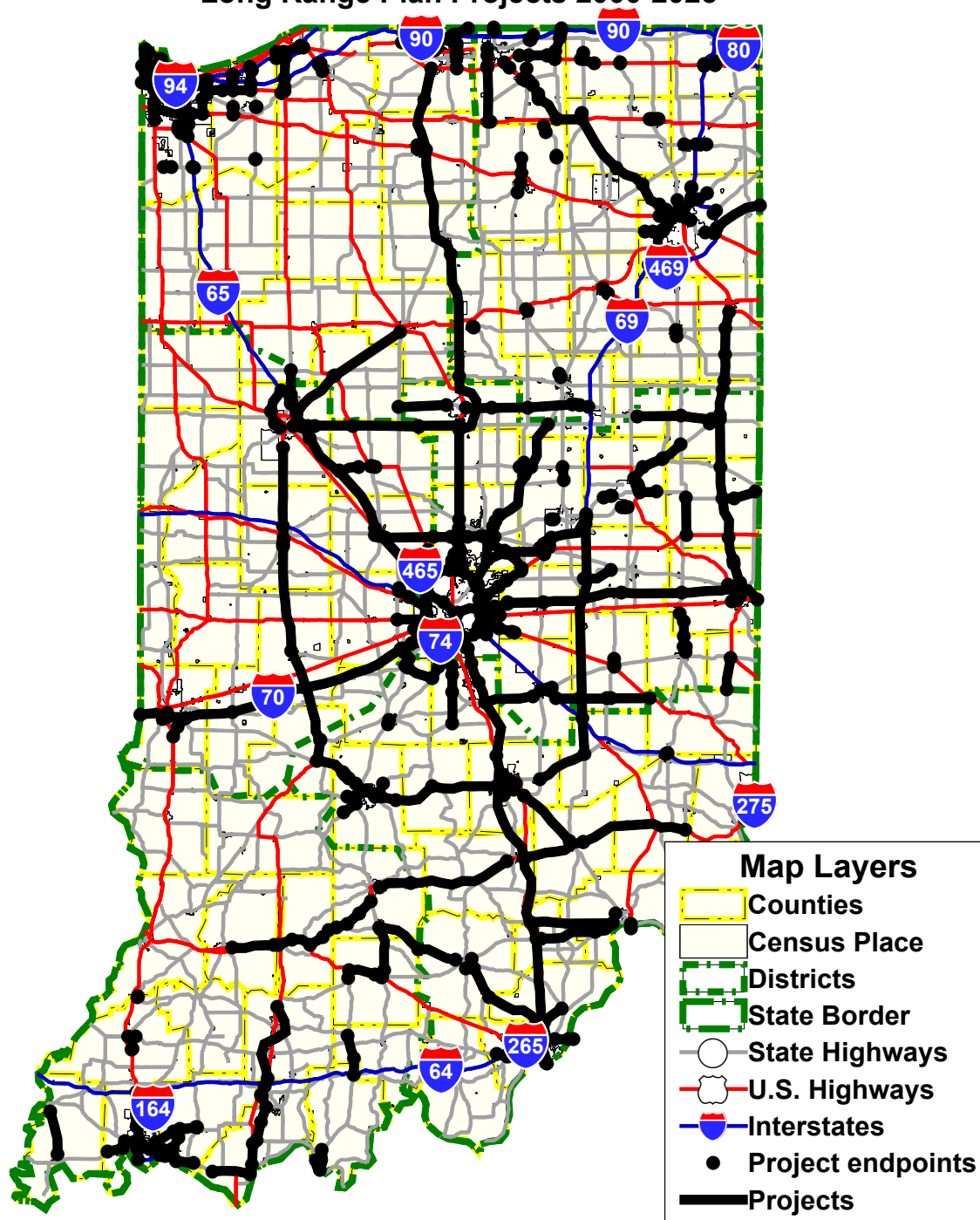
Current 25 Year Plan Listing			
Fiscal Constraint			
Funding Period	Funds Available for Preservation	Estimated Spending for Expansion Projects	Total
2000-2004	\$1,688.4	\$1,880.8	\$3,569.2
2005-2009	\$2,488.3	\$2,537.1	\$5,025.4
2010-2014	\$4,118.5	\$2,680.8	\$6,799.3
2015-2019	\$3,919.1	\$3,183.5	\$7,102.7
2020-2025	\$5,300.8	\$3,507.6	\$8,808.4
	\$17,515.1	\$13,789.9	\$31,305.0

NOTE: All figures are listed in millions of current (2000) dollars

The 2000-2025 Long Range Plan

The 2000-2025 Long Range Plan Projects map illustrates the highway improvements recommended in the INDOT 2000-2025 Long Range Plan. The full INDOT 2000-2025 Long Range Plan provides maps of each district and MPO, along with detailed project listings, providing improvement type and implementation phasing information.

Long Range Plan Projects 2000-2025



Three placeholder projects are not shown on the map due to uncertainty over their potential alignments but are included in the plan's 25-year program improvements. These are:

1. Central Indiana Suburban Transportation Improvements
2. North West Indiana South Suburban/Illiana Expressway
3. I-69/Corridor 18 Indianapolis to Evansville extension

1-30-02



Long Range Plan Improvement Types

The Long Range Plan is focused upon improvement types that increase the carrying capacity of the transportation system and improve the highway's ability to serve longer distance, higher speed inter-city travel, including commercial vehicles. These expansion projects receive special attention due to their long development time. A typical expansion project usually has a minimum seven to eight year development process made of four stages: planning/environmental studies, design engineering, land acquisition, and construction. Each stage requires one, two, or sometimes three years for completion. In addition to the long lead time needed for project implementation, expansion projects may create significant impacts to our environment which require consideration of long-range impacts. Improvement types are:

1. Added Travel Lanes
2. New Road Construction
3. Reconstruction 4R
4. Rehabilitation 3R
5. Transportation System Management
6. Median Construction
7. Interchange Modification
8. New Interchange Construction
9. New Bridge Construction
10. Freeway Upgrade



An Evolving Document

The Indiana Department of Transportation 2000–2025 Long Range Plan is an **evolving** document. The 25 year project listing contained within the full report is flexible. Predicting the future is a difficult task. This plan will be amended periodically so that we can adapt to changing needs, priorities, and fiscal realities. INDOT anticipates that our Long Range Plan will be formally updated every two years. In the meantime, **we are receptive to and encourage your comments.** Together, we can provide for a safe, efficient, effective, reliable transportation system for all Hoosiers and those who pass between our borders here at the ***Crossroads of America.***



The INDOT 2000-2025 Long Range Transportation Plan, including detailed maps and project listings, is available on INDOT's Web site: <http://www.state.in.us/dot/pubs/longrange/index.html>

For more information on the INDOT 2000-2025 Long Range Plan, please contact the Long Range Transportation Planning Section at SSmith@INDOT.state.in.us or by writing:



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